

REMARKS

Claims 1-50 are pending. Claims 10-32 and 34-46 are withdrawn from consideration as being directed to a non-elected invention. Claims 47-50 are newly added. Claims 1-9 and 33 stand rejected.

Claims 10-32 and 34-46 stand withdrawn from consideration as being drawn to a non-elected invention. The restriction has been made final.

Applicants have amended claims 1, 2, 8, and 9. Basis for amendments to claims 1 and 2 are provided below. Claims 8 and 9 have been amended to introduce an article for clarity. Support for new claims 47-50 is found, for example, in originally-filed claim 1, and, elsewhere throughout the specification. No prohibited new matter has been introduced by these amendments and entry is respectfully requested.

Figures 10 and 11 of the drawings filed on March 4, 2004 have been objected to by the Examiner because nucleic acid sequences appear in these figures without accompanying sequence identifiers.

Applicants have amended the specification in the Brief Description of the Figures to refer to the sequence identifiers. In preparing these amendments, we noted that the Sequence Listing did not include the sequences for ScSSU1 and ScMET14, as depicted in Figures 10 and 11 respectively. Applicants submit herewith a substitute Sequence Listing and Statement which includes those sequences. As the sequences were included in the original figures, Applicants do not believe any new matter is introduced by entry of the subject amendments. Applicants also provide herewith substitute sheets for Figures 10 and 11. Accordingly, Applicants respectfully request withdrawal of the objection in light of the amendment to the specification.

The nucleotide sequences as they appeared in Table 8 without identifying SEQ ID NOS. were objected to in the Office Action. Applicants have amended Table 8 to include sequence identifiers and have included the sequences in the substitute Sequence Listing as necessary. Accordingly, this objection should, respectfully, be withdrawn.

Table 4 on page 88 of the specification was objected to as being illegible. Applicants respectfully disagree. The data provided in the chart is discernable. Nevertheless, Applicants provided herewith a clearer copy of Table 4 for purposes of duplication by the Patent Office should a patent issue from the instant application. In view of the submitted clearer copy, Applicants respectfully request withdrawal of the objection.

The Office Action required deletion of embedded hyperlinks and/or other forms of browser-executable code as occur on specification page 9, line 7, page 30, lines 20, 25 and 28; and page 66, line 19. Applicants have amended the specification at those cites to refer to a website in non-executable form according to the examples provided in M.P.E.P. § 707.05(e). In view of the amendment, Applicants respectfully request withdrawal of the objection.

At page 3 of the Office Action, claim 1 is objected to for recitation of the phrase “whole genome sequence of industrial yeast.” In reply, claim 1 has been amended as suggested by the Examiner. In view of the amendment to the claim, Applicants respectfully request withdrawal of the objection.

Claims 1-9 and 33 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 stands rejected for recitation of the phrase “improvement in flavor.” The Office asserts that the specification does not provide a standard for ascertaining the requisite degree. Without acquiescing as to the merits of the rejection, Applicants have deleted the phrase from claim 1 and included the phrase in new claim 47.

Claim 1 is also rejected because “the instant application does not describe or provide a whole genome sequence of any yeast.” Office Action, page 3.

Claim 1 further stands rejected as indefinite for recitation of “functional analysis is carried out.” Specifically, the claim is rejected because it allegedly does not recite a positive process step. Without acquiescing as to the merits of the rejection, Applicants have deleted the phrase from claim 1. Accordingly, this aspect of the rejection under indefiniteness should be withdrawn and the claim allowed.

Claim 2 stands rejected as allegedly indefinite for the recitation of “DNA array is used.” The phrase is asserted as indefinite because it is not a positive process step. Applicants have amended the claim such that a positive process step is recited. In view of the amendment, Applicants respectfully request withdrawal of the rejection.

Claim 3 stands rejected for recitation of “DNA sequence having 10 to 30 nucleotides existing in an open reading frame of the whole genome sequence of an industrial yeast and not existing in the region other than the region of said 10 to 30 nucleotides sequence in the

whole genome sequence.” The phrase allegedly is indefinite because the specification does not disclose the whole genome sequence of any yeast.

Applicants respectfully traverse the rejection. First, *S. cerevisiae* is a yeast and its genome was publicly available in the 1990’s. Second, at least one other yeast genome was publicly available at that time, namely that of *Schizosaccharomyces pombe*. According to the NCBI genome website, the genome for *S. pombe* was publicly available February 28, 2002. Applicants do not have to provide information in the specification of material that is publicly available.

Additionally, under M.P.E.P. § 2173 the primary purposes of the § 112, second paragraph, is to “ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability....” The claims are directed to a method of screening for genes in industrial yeast genomes. The crux of the method is to use the *Saccharomyces cerevisiae* genome in order to identify additional genes, such as, for example, alcohol producing or flavor stabilizing genes, in other industrial yeast by a variety of steps. The steps are clear in what they describe.

Claim 5 is also rejected for the same reasons as claim 3 (claim 5 is directed to non-coding domains while claim 3 is directed to ORFs). Claim 5 is definite for the same reasons as posited above for claim 3.

Claims 1-9 and 33 stand rejected under 35 U.S.C. § 112, first paragraph as lacking written description. The Office states that “[t]he instant application requires the use of nucleic acids that are not adequately described in writing.” Office Action, page 4.

Applicants traverse the rejection. According to M.P.E.P. §2163 (III)(A), the Office *must* identify the claim limitation at issue and establish a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. Applicants point out that the Office has not objected to any claim limitation of any of claims 1-9 or claim 33. Applicants request either withdrawal of the rejection or findings of fact and establishment of a *prima facie* case for each of the claim limitations at issue in support of the written description rejection. In the event of the

latter, Applicants point out that no *prima facie* rejection has been adduced for the instant Office Action.

On pages 5-6 of the Office Action, the Office provisionally rejected claims 1, 2, 8, and 9 on the ground of non-statutory obviousness type double patenting over claims 1-8 and 12 of co-pending Application No. 10/932,182 ['182] or claims 1-8 and 12 of co-pending Application No. 11/217,529 ['592].

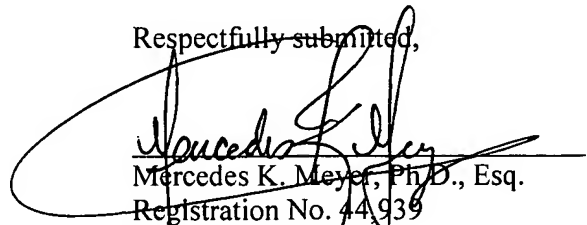
Without acquiescing as to the merits of the rejection, Applicants respectfully request that the rejection be held in abeyance until the claims in the instant application are allowed and claims in one or both of the other applications are also in condition for allowance, but for the non-statutory type double patenting. At that time, Applicants will determine whether a Terminal Disclaimer is necessary in this or one of the other applications. However, filing a Terminal Disclaimer at this point is premature as the claims that may issue in this case and in any of the '182 or '529 cases may differ from the claims currently under examination.

In conclusion, this amendment and reply is believed to be a full response to the outstanding Office Action. Should any issues remain outstanding or if there are any questions concerning this paper, or the application in general, the Examiner is invited to telephone the undersigned representative at the Examiner's earliest convenience.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, and Notice of Appeal fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

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Respectfully submitted,


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